## THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

CIRBA INC. (d/b/a/ DEI	NSIFY)
and CIRBA IP, INC.,	

Plaintiffs,

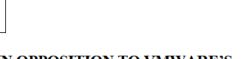
v.

VMWARE, INC.,

Defendant.

Civil Action No. 19-cv-742-GBW

JURY TRIAL DEMANDED



# DENSIFY'S OMNIBUS BRIEF IN OPPOSITION TO VMWARE'S DISPOSITIVE MOTIONS UNDER RULES 56, 12(B)(1), AND 12(C) AND MOTIONS TO EXCLUDE EXPERT TESTIMONY

Dated: December 13, 2022

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ATTORNEYS FOR CIRBA INC. (D/B/A DENSIFY)

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Cirba Inc.	"Inc."
Cirba IP, Inc.	"IP"
Declaration of Connor S. Houghton in Support of Densify's Opposition to VMware's Dispositive Motions under Rules 56, 12(b)(1), and 12(c) and Motions to Exclude Expert Testimony	"Houghton Decl."
Exhibits attached to concurrently filed Declaration of Connor S. Houghton	"Ex"
Declaration of Andrew Hillier (December 13, 2022)	"Hillier Decl."
Declaration of Gerry Smith (December 13, 2022)	"Smith Decl."
U.S. Patent No. 8,209,687	"'687 patent" or Ex. 1
U.S. Patent No. 9,654,367	"'367 patent" or Ex. 2
U.S. Patent No. 10,523,492	"'492 patent" or Ex. 3
U.S. Patent No. 10,951,459	"'459 patent" or Ex. 4
Transcript of January 2020 Trial (D.I. 587 – D.I. 597)	"TT"
VMware's Concise Statement of Undisputed Facts for Motion for Summary Judgment No. 1 – No Trademark Claim (D.I. 1418)	"VSMF1"
Densify's Response to VMware's Concise Statement of Undisputed Facts for Motion for Summary Judgment No. 1 – No Trademark Claim	"RSMF1"
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Densify's Statement of Material Facts in Support of Densify's Opposition to VMware's Motion for Summary Judgment No. 4 – Failure to Mark ('687 Patent)	"DSMF4"
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Person of ordinary skill in the art	"POSA"
VMware Inc. v. Cirba Inc., No. 19-cv-1334-TSE, E.D. Va.	"E.D. Va. Case"
VMware Inc. v. Cirba Inc., No. 20-cv-00272, D. Del.	"No. 20-272"

Cirba Inc. (dba Densify) ("Densify" or "Inc.") opposes VMware's omnibus motion, D.I. 1440.

This case previously went to the jury because there were fact issues precluding summary judgment, and the experts relied on sound methodology. These reasons have not changed. Indeed, many of VMware's current assertions are recycled versions of previously rejected arguments. Those rulings were thoroughly considered and correct, and VMware offers no reason to revisit them. All that changed is reassignment of the case, which VMware uses as an opportunity to revisit long-decided questions without even acknowledging the prior rulings. VMware's arguments focus on how it disagrees with Densify, but those disagreements are no reason to exclude experts, and demonstrate genuine issues of material fact for the jury to resolve. Beyond that, VMware elevates "tyranny of formalism" over the merits, urging dismissal of the case based on procedural "gotchas."

Further, instead of using the Court's page limits as encouragement to thoughtfully select its points, VMware took it as an invitation to make more arguments in less space, without fully developing most of them. If history holds true, its first brief is a shotgun blast, forcing the response to dozens of arguments within page constraints, only to have VMware pick a few issues to develop in reply. If VMware has not fully developed an argument in its opening brief, the Court may reject it. *United States v. Dunkel*, 927 F.2d 955, 956 (7th Cir. 1991) (per curiam) ("Judges are not like pigs, hunting for truffles buried in briefs."); *id.* ("A skeletal 'argument,' really nothing more than an assertion, does not preserve a claim. Especially not when the brief presents a passel of other arguments . . . ." (citation omitted)); *Barna v. Bd. of Sch. Dirs. of the Panther Valley Sch. Dist.*, 877 F.3d 136, 145-47 (3d Cir. 2017) ("[W]e have consistently refused to consider ill-developed arguments . . . .").

<sup>&</sup>lt;sup>1</sup> Cirba Inc. and Cirba IP, Inc. have amalgamated into Cirba Inc. d/b/a Densify (D.I. 1416); to the extent permitted or required, this brief should be construed as submitted on behalf of Cirba IP too.

#### **SUMMARY OF THE ARGUMENT**

- 1. VMware's summary judgment motions should be denied because they ignore disputed material facts while largely rehashing the same arguments the Court already rejected before the 2020 trial. In particular: (1) the Court has discretion to permit Densify's registered trademark claim to be asserted in the pretrial order and tried because it will cause VMware no prejudice; (2) there is ample record support for VMware's willful infringement of the '367 patent; (3) fact issues preclude summary judgment on infringement of the '687 patent; (4) there are at a minimum genuine disputes of material fact as to patent marking; and (5) fact issues preclude summary judgment as to VMware's induced infringement claim, and the Court has rejected contrary arguments multiple times.
- 2. VMware's Rule 12 motions should be denied. As to the '492 patent, IP has asserted a claim for infringement from the outset, and Inc. has Article III and "statutory standing." On § 101, the Court already found claim 3 of the '687 patent eligible, and VMware is statutorily estopped from its argument as to the '459 patent; anyhow, both patents are eligible under § 101 as a matter of law.
- 3. VMware's *Daubert* motions should be denied. Both motions are attempts to exclude essentially the same testimony the Court allowed in at the 2020 trial, and at best, both focus on criticisms that go to weight, not admissibility.

#### NATURE AND STAGE OF THE PROCEEDINGS

This case was filed in April 2019, D.I. 1, and is set for an April 2023 retrial, D.I. 1489. The original plaintiffs were Cirba Inc. (d/b/a/ Densify) ("Inc.") and Cirba IP, Inc. ("IP"), which have since amalgamated under Canadian law into the single entity Cirba Inc. ("Densify"), with "all the property, rights, and privileges of Inc. and IP that existed at the time of the amalgamation." D.I. 1396 at 8.

#### FACTUAL BACKGROUND

#### I. Background on Virtualization Technology

This case involves software technology known as "virtualization," which is the act of creating

a "virtual" version of something. D.I. 13 ¶ 54. It relies on software to simulate hardware functionality and create a virtual computer system, allowing companies to run more than one application (frequently referred to as "workload") on a single physical server using virtual machine ("VM") technology. *Id.* ¶¶ 54-56. In virtualized environments, the physical server and related software can be called a "host," and the VM running on the host can be called a "guest." *Id.* Virtualization also allows multiple hosts to be arranged in a larger group of hosts known as a "cluster." *Id.* ¶ 55.

With virtualization, one host can run many applications because each runs on a VM sharing the host's resources. D.I. 13 ¶ 54. Without virtualization, different applications running on the same host could create resource conflicts—each piece of software competing for limited processing and storage capabilities of a physical server. *Id.* ¶¶ 51, 54-55. VMs allow time and capacity sharing among competing workloads and their operating systems on the same physical server. *Id.* ¶¶ 57-58, 142.²

But companies with large IT infrastructures, especially those with thousands of servers, face highly complex decisions to properly manage their virtualized environments. D.I. 14 ¶¶ 10-13. This management involves making decisions about which VMs to run on which hosts. *Id.* ¶¶ 14-15. In the past, determining optimal placements of VMs in short times while honoring complex operating and licensing constraints was not practical and posed difficulties. *Id.*; D.I. 13 ¶ 142.

Densify invented software that addresses customers' virtual infrastructure needs through host-based workload optimization. D.I. 14 ¶ 13, 15-16.<sup>3</sup> Instead of focusing VM placement decisions on cluster-wide data, Densify's software focuses on each individual host (server) and VM—hence, its innovation often is referred to as host-based placement. *See id.* Focusing on the host instead of the

<sup>&</sup>lt;sup>2</sup> Densify's technical expert, Dr. Vijay Madisetti, provides a detailed overview of virtualization technology in his expert report. *See* D.I. 1443 ¶¶ 38-47.

<sup>&</sup>lt;sup>3</sup> Andrew Hillier, Densify's CTO, provides an overview of Densify's product in his declaration submitted with Densify's motion for a preliminary injunction. *See* D.I. 14 ¶¶ 7-48. Additional information on the technology is available in Densify's technology tutorial. D.I. 246.

cluster allows Densify's software to optimize VM placement to reduce risk, create efficiencies, conserve resources, and reduce costs, along with other benefits. Id. ¶ 29.

Densify won awards for its workload optimization software and was recognized as an industry leader. D.I. 14 ¶¶ 34-36. As a result of its innovations, the U.S. Patent & Trademark Office ("PTO") awarded Densify numerous patents, including those at issue in this case: the '687, '367, '492, and '459 patents. The 2020 trial involved the '687 and '367 patents, which are the focus of VMware's motions.<sup>4</sup>

#### II. The '687 Patent Claims

The '687 patent relates to managing a virtualized environment through host-based workload optimization. It centers on using three types of constraints—technical, business, and workload—to determine which VMs go on which hosts. A technical constraint involves technical parameters relevant to VM placement, such as operating system requirements and hardware needs. '687 patent at 7:44-46; *see also id.* at 7:39-43. Business constraints involve business parameters, such as software licensing agreements, hardware lease agreements, and organizational department. D.I. 357 at 2; *see also* '687 patent at 26:24-25. Workload constraints involve workload parameters such as resource utilization, capacity, and memory. '687 patent at 7:51-55; *see also id.* at 26:44-47.

Claim 7 of the '687 patent states:

- 7. A method for validating an existing virtualized environment comprising a plurality of virtual machines placed on one or more virtual hosts, said method comprising:
- [A] obtaining a data set for each of said plurality of virtual machines, each data set comprising information pertaining to technical, business and workload constraints associated with a corresponding virtual machine;
- [B] evaluating the placement of said virtual machines in said virtualized environment using said data sets by evaluating each virtual guest against each virtual host and other virtual guests using one or more rule sets pertaining to said technical, business and workload constraints to determine guest-host placements; and
  - [C] identifying the existence of virtual machines with suboptimal placements to enable

<sup>&</sup>lt;sup>4</sup> Given recent PTO rulings invalidating the '492 and '459 patents, Densify has agreed to sever and stay those patents pending resolution of its appeal, and plans to file a motion to that effect. As a result, the Court may decide to not address issues relating solely to those two patents at this time.

alternative placements for said virtual machines.

'687 patent at 38:57-39:4. The three steps are used to validate an existing "virtualized environment," which is given its plain and ordinary meaning. D.I. 476. In this case, the virtualized environment is the particular environment defined by the software—the boundary within which VMs are moved among hosts. Thus, for example, with VMware's DRS product, the "virtualized environment" can be the cluster; VMs are moved among hosts within that cluster.

In the first step [A], the system obtains a data set for each VM. Those data sets include (comprise) information associated with each VM pertaining to technical, business, and workload constraints. In general terms, this means that if a VM has information related to technical, business, or workload constraints, that information is included in the data set. As a simplified analogy, consider seating assignments at a dinner event for lawyers. Imagine there are three constraints that could affect an assignment: dietary restrictions, firm, and practice area. Information related to all three constraints would be gathered into a "data set" associated with each person.

In the second step [B], the system evaluates the placement of VMs in the virtualized environment using the data sets obtained in step [A]. It does this by evaluating each VM against each host and other VMs. This evaluation is done using at least one rule set that pertains to technical, business, and workload constraints. So, the system evaluates the VMs and hosts using a rule set with the three types of constraints. It then uses that evaluation to determine which VMs go on which hosts. Continuing the analogy, the event organizers can assign rules that pertain (relate to) the three constraints. One "rule set" might say that vegetarians should be at tables 1, 2, or 3; that people in the same firm should not be seated together; and that people in the same practice area should be seated together. That set includes rules related to each of the three types of constraints. There could be more rule sets, but claim 7 requires at least one. The rule set is then used to evaluate the data sets to determine each person's placement at tables. A person's seating may not be constrained by a rule (e.g., if they

have no dietary restrictions), but that person is evaluated with the rule set.

Then, in step [C], the system identifies suboptimally placed VMs to enable alternatives.

The claims of the '687 patent have gone through multiple rounds of claim construction, resulting in a series of rulings. D.I. 356, D.I. 476, D.I. 1160.

#### SUMMARY JUDGMENT STANDARD

Summary judgment is appropriate only if no "reasonable jury could return a verdict for the nonmoving party." *Clews v. County of Schuylkill*, 12 F.4th 353, 358, 363 (3d Cir. 2021) (attribution omitted); Fed. R. Civ. P. 56(a). The Court "must review the record as a whole, draw all reasonable inferences in favor of the nonmoving party, and must not weigh the evidence or make credibility determinations." *Bletz v. Corrie*, 974 F.3d 306, 308 (3d Cir. 2020) (cleaned up).

#### SUMMARY JUDGMENT NO. 1—DENSIFY'S TRADEMARK CLAIM

Densify asserts a claim for VMware's infringement of its registered trademark "DENSIFY." Ex. 46 (trademark registration). The January 2020 trial involved Densify's claim under the Lanham Act for violation of its common law trademark rights. 15 U.S.C. § 1125(a); *Parks LLC v. Tyson Foods, Inc.*, 863 F.3d 220, 230 (3d Cir. 2017) (§ 1125(a) encompasses claims for violation of common law trademark rights). After trial, the PTO issued a registration of the DENSIFY mark. Ex. 46. Accordingly, Densify now asserts a different claim under a different statutory section—this time, for infringement of a federally registered trademark under 15 U.S.C. § 1114; *see also Lucent Info. Mgmt., Inc. v. Lucent Techs., Inc.*, 186 F.3d 311, 315 (3d Cir. 1999) (registered trademark is prima facie evidence of several elements of a trademark infringement claim).

VMware's summary judgment motion is based on a procedural (not merits) objection—namely, that Densify's claim should be dismissed because it did not amend its complaint to clarify that it was now asserting a claim for its now-registered trademark. D.I. 1440 at 4-5. What claims are tried depends on what claims are permitted in the pretrial order. It is well settled that a pretrial order may

include claims not in the complaint. *Rockwell Int'l Corp. v. United States*, 549 U.S. 457, 474 (2007) (citing authority for rule that "where a claim was not included in the complaint, but was included in the pretrial order, it is irrelevant that the pleadings were never formally amended" (cleaned up)).

The Court has discretion to include in the upcoming pretrial order claims that were not formally pleaded, mooting VMware's motion. See, e.g., Rockwell, 549 U.S. at 474; Bornstein v. Monmouth Cnty. Sheriff's Off., 658 F. App'x 663, 671-72 (3d Cir. 2016) (reviewing whether to include unpleaded claim in pretrial order for abuse of discretion); Beissel v. Pittsburgh & Lake Erie R.R. Co., 801 F.2d 143, 150 (3d Cir. 1986) ("[D]eparture from or adherence to the pretrial order is a matter peculiarly within the discretion of the trial judge."); 6A Wright & Miller, Federal Practice and Procedure § 1526 (3d ed. updated 2022). The Court also has discretion to permit amendment of the complaint under Rule 15(b)(1), which "should be interpreted liberally, in favor of permitting amendment whenever doing so will serve the underlying purposes of the Rule." Feuerstein v. Simpson, 582 F. App'x 93, 98 (3d Cir. 2014); Miranda–Rivera v. Toledo–Dávila, 813 F.3d 64, 73 & n.5 (1st Cir. 2016) (reversing summary judgment even though a claim was unpleaded because "complaints can be amended as late as trial to conform to the evidence" under Rule 15(b)(1)). The question in either case boils down to whether the defendant would be unfairly prejudiced by trial on the claim or theory. Bornstein, 658 F. App'x at 671-72 (including unpleaded claim in a pretrial order requires courts to "carefully assess[] the prejudice to the opposing party"); Swiatek v. Bemis Co., 542 F. App'x 183, 188 (3d Cir. 2013).

Thus, the Court has discretion on this point, and the question is whether VMware has been prejudiced. It has not—and does not even claim prejudice in its brief. From the outset of this case, VMware was on notice of Densify's application for a trademark registration. It was referenced in the First Amended Complaint filed on June 18, 2019. D.I. 68 at ¶ 130. VMware took extensive discovery into, prepared for trial on, and actually litigated Densify's common law trademark claim at the first

trial. DSMF1 ¶8; see Liberty Lincoln–Mercury, Inc. v. Ford Motor Co., 676 F.3d 318, 326-27, 328 (3d Cir. 2012) (prejudice where party lacked discovery of unpleaded claim). That discovery is directly applicable, because while there are distinct elements to a registered trademark claim, much of the claim overlaps. VMware had ample opportunity to take—and did in fact take—additional discovery into Densify's registered trademark claim. After trial, Densify notified VMware that it planned to pursue its trademark infringement claim. Ex. 47. Indeed, VMware acknowledged in March 2022 (well before the June 2022 discovery cutoff) that Densify continued to pursue its trademark claim. Ex. 48. VMware questioned witnesses at depositions on topics related to the trademark claims. DSMF1 ¶7. In fact, VMware recently used the trademark claims as a basis for obtaining discovery in Canada under the letters rogatory process. D.I. 1210 at 1-3, 5, 7-8 ("Evenkeel's right to use and own Cirba's purported trademarks is relevant to the trademark claims that Cirba seeks to relitigate.").

Accordingly, VMware has not been unfairly prejudiced, and the Court should exercise its discretion to permit Densify to include its trademark claim in the pretrial order. This particularly appropriate because the modern rules favor resolutions on the merits over "tyranny of formalism." Wright & Miller, *supra* § 1491 (acknowledging rule changes designed to "avoid the tyranny of formalism that was a prominent characteristic of former practice and to avoid the necessity of a new trial, which often followed a deviation from the pleadings" (cleaned up)). As the D.C. Circuit stated:

The whole thrust of modern pleading is towards fulfillment of a notice-giving function and away from the rigid formalism of the common law. . . . If it is clear that the parties understand exactly what the issues are when the proceedings are had, they cannot thereafter claim surprise or lack of due process because of alleged deficiencies in the language of particular pleadings. Actuality of notice there must be, but the actuality, not the technicality, must govern.

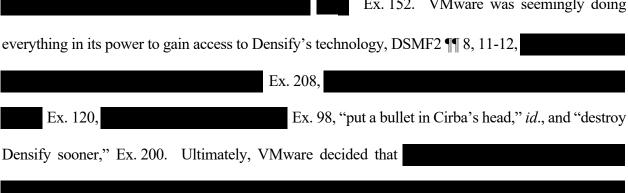
Kuhn v. Civil Aeronautics Bd., 183 F.2d 839, 841-42 (D.C. Cir. 1950) (cleaned up).

VMware is on notice and would suffer no prejudice from trial of the registered trademark claim. Permitting these claims in the pretrial order is particularly appropriate to conserve judicial resources—the consequence of not permitting this claim now would be to have a separate lawsuit on

the trademark claim, expending the unnecessary resources to bring that claim to a separate trial.

#### SUMMARY JUDGMENT NO. 2—NO WILLFUL INFRINGEMENT ('367 PATENT)

In the 2020 trial, the jury found that VMware willfully infringed the 367 patent. There is no shortage of evidence that VMware's infringement was (and is) willful. The record paints a picture of VMware, a self-titled "800-pound gorilla," with the market power and tools to take from Densify (an "anklebiter") patented technology without consequences. DSMF2 ¶ 1. And VMware did just that. *Id.* **VMware** . DSMF2 ¶¶ 3-4. In VMware's own words, Ex. 55. DSMF2 ¶ 7, Ex. 96, VMware Ex. 71; DSMF2 ¶ 8. Getting access to Densify's technology proved to be a challenge, and VMware asked Ex. 154. Ex. 152. VMware was seemingly doing



Ex. 111. And even VMware's now-CEO admitted under oath, taking inferences in Densify's favor, that VMware's dashboard seems to be a copy of Densify's—the dashboard that embodies the '367 patent. DSMF2 ¶ 13.

For the retrial, VMware seeks to take from the jury the fact question whether it willfully infringed the '367 patent because it allegedly (i) did not know about the '367 patent pre-suit and (ii) did not act egregiously post-suit. Neither argument can deliver VMware summary judgment.

First, a jury could easily infer on this record that VMware knew about the '367 patent. DSMF2 ¶ 5. In their negotiations, Densify informed VMware that it had patents pending. Ex. 81; see also Exs. 82-85. And VMware took notice. See, e.g., Ex. 86. Ex. 81. Indeed, VMware's own PowerPoints Ex. 97; Ex. 90 (Singh Dep.) 165:20-25 ( ); id. 155:20-156:9 ( VMware Ex. 87 (Scheerer Dep.) 227:10-15; DSMF2 ¶¶ 3, 5. And indeed it did become an acquisition target. Ex. 69 ( ). VMware DSMF2 ¶¶ 5, 11; Ex. 87 (Scheerer Dep.) 203:3-204:20, and DSMF2 ¶¶ 5, 11; Ex. 87 (Scheerer Dep.) 210:8-211:11. It was important enough for employees to pull and circulate information about Densify's patents in the middle of the Fourth of July holiday. Ex. 75. VMware then, by its own admission, copied Densify's dashboard practicing the '367 patent. Ex. 134 (Raghuram Dep.) 67:12-68:11. Curiously, Exs. 92-93. But waited until after

VMware was adjudged an infringer—and could no longer deny knowledge of the patent—to disclose

the '367 patent to the U.S. Patent Office in the '713 patent prosecution. DSMF2 ¶ 6; Ex. 94.

F.2d 1561, 1568 (Fed. Cir. 1986). Contrary to VMware's argument, there is no requirement that all willfulness evidence be "direct"; circumstantial evidence suffices. See, e.g., Sunoco Partners Mktg. & Terminals LP v. Powder Springs Logistics, LLC, 2022 WL 3973479, at \*7 (D. Del. Aug. 31, 2022); see also Michalic v. Cleveland Tankers, Inc., 364 U.S. 325, 330 (1960) ("Circumstantial evidence is not only sufficient, but may also be more certain, satisfying and persuasive than direct evidence."). Indeed, circumstantial evidence is often all that is available when it comes to state of mind. See, e.g., Kilopass Tech., Inc. v. Sidense Corp., 738 F.3d 1302, 1311 (Fed. Cir. 2013) (a "party confronted with the difficulty of proving what is in an adversary's mind must be at liberty to prove facts establishing that that adversary should have known, i.e. to prove facts that render the 'I didn't know' excuse unacceptable'); Warsaw Orthopedic, Inc. v. NuVasive, Inc., 824 F.3d 1344, 1347 (Fed. Cir. 2016) (intent may be inferred from circumstantial evidence for inducement).

A reasonable factfinder, reviewing all circumstances here, could find that VMware knew of the '367 patent. VMware suggests that Densify's evidence only shows "knowledge of the '367 patent application" and "cannot support a willfulness finding." VMware Br. 6. But knowledge of the '367 patent application is only one of the many circumstances relevant here. Evidence that predates the patent's issuance is relevant to VMware's deliberate and intentional state of mind and may "be used to support a finding of willfulness." *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1581 (Fed. Cir. 1992); *Idenix Pharms. LLC v. Gilead Scis., Inc.*, 2016 WL 7380530, at \*1 (D. Del. Dec. 4, 2016) (rejecting argument that pre-patent conduct was not relevant to willfulness); *Sunoco*, 2022 WL 3973479, at \*7 (same). Pre-issuance conduct may be especially relevant when there is "particularly egregious behavior," *Chimie v. PPG Indus., Inc.*, 218 F.R.D. 416,

422 (D. Del. 2003), like here, DSMF2 ¶¶ 8-14.

The '367 patent reads on Densify's control console, an aspect of the user interface VMware was actively trying to copy, DSMF2 ¶¶ 2, 13. The record reveals a VMware with a culture of copying that launched a coordinated effort to gain access to Densify's technology and copy it for itself. DSMF2 ¶¶ 6-14. VMware even

Ex. 134 (Raghuram Dep.) 60:2-67:11, Exs. 102, 106. Even though VMware's copying alone is not actionable as infringement because it occurred before the '367 patent issued, those copying activities evidence post-issuance infringement that is "intentional and deliberate, in willful disregard of [Densify's] rights." *Milgo Elec. Corp. v. United Bus. Commc'ns, Inc.*, 623 F.2d 645, 666 (10th Cir. 1980). Use of the copied dashboard continued after the patent issued. A reasonable jury could conclude that VMware knew of the '367 patent "as [it] issued (if not earlier) and that the risk of infringement was . . . so obvious that it should have been known." *WCM Indus., Inc. v. IPS Corp.*, 721 F. App'x 959, 971 (Fed. Cir. 2018); *see Kaufman Co. v. Lantech, Inc.*, 807 F.2d 970, 978-79 (Fed. Cir. 1986) (rejecting argument that pre-patent copying "cannot be considered").

Second, VMware argues that it should escape responsibility for its willful infringement because its behavior was not "egregious." VMware Br. 7. As a threshold matter, VMware erects an exaggerated standard for willfulness that must be rejected under the controlling law. Willfulness is "no more than deliberate or intentional infringement." Eko Brands, LLC v. Adrian Rivera Maynez Enters., 946 F.3d 1367, 1378 (Fed. Cir. 2020). But there can be no doubt that VMware's multifront effort to gain unauthorized access to Densify's technology, copy it, poach customers, and "destroy" the company qualifies as both intentional and egregious. DSMF2 ¶¶ 8-14.

From VMware's telling, it "deprecated" the infringing product "before it became aware of the '367 patent," and "removed the accused feature" before trial, so it cannot be found to be egregious.

VMware Br. 7-8. This argument requires accepting the most favorable inference VMware can draw for itself from the facts—the opposite of the summary judgment standard. Only well after called to the mat in a lawsuit did VMware make any changes to avoid infringement (and then months later), and those changes do not negate as a matter of law VMware's previous culpable state of mind.

VMware's cases are inapposite. For example, *iFIT Inc. v. Peloton Interactive, Inc.*, 2022 WL 609605 (D. Del. Jan. 28, 2022), stands for the unremarkable proposition that knowledge of a patent application "alone" is insufficient, but it provides no answer for this case, where the volume of willfulness evidence is staggering. *Bioverativ Inc. v. CSL Behring LLC*, 2020 WL 1332921, at \*4 (D. Del. Mar. 23, 2020), is similarly unavailing. There, the Court granted summary judgment noting the absence of evidence of "deliberate copying of the commercial product of the patent owner before issuance of the patent"—the very evidence that is present on this record.

At bottom, "[t]he drawing of inferences, particularly in respect of an intent-implicating question such as willfulness, is peculiarly within the province of the fact finder that observed the witnesses." *Liquid Dynamics Corp. v. Vaughan Co.*, 449 F.3d 1209, 1225 (Fed. Cir. 2006) (quoting *Rolls–Royce, Ltd. v. GTE Valeron Corp.*, 800 F.2d 1101, 1110 (Fed. Cir. 1986)). VMware refers back to Judge Stark's comments about the strength of the willfulness case. But Judge Stark's comments evaluate a markedly different record. The volume of willfulness evidence *on this record*, augmented by VMware's now-produced (but previously inexplicably withheld) documents and fulsome depositions, far surpasses that presented in the previous trial. DSMF2 ¶ 14.

#### **SUMMARY JUDGMENT NO. 3—INFRINGEMENT ('687 PATENT)**

The '687 patent claims survived summary judgment before the 2020 trial, where a jury found that DRS infringed. After hearing the evidence at trial, the Court noted its inclination that sufficient infringement evidence supported the verdict and that the jury could have credited Dr. Madisetti's testimony. D.I. 575. Those proceedings had substantively the same claim construction.

VMware's motion at most disputes how the claim language applies to the accused products. This is a fact question for the jury. *Int'l Rectifier Corp. v. IXYS Corp.*, 361 F.3d 1363, 1369 (Fed. Cir. 2004) ("Comparison of the claims to the accused device requires a factual determination that every claim limitation or its equivalent is found in the accused device."); *Philips Elecs. N. Am. Corp. v. Contec Corp.*, 312 F. Supp. 2d 642, 644-45 (D. Del. 2004), *aff'd*, 177 F. App'x 981 (Fed. Cir. 2006).

VMware seems to suggest that the Court granted a new trial based on insufficient evidence. That defies logic. Indeed, the Court was clear that it was not deciding the sufficiency question. D.I. 946 at 11-12. The Court's discussion of the merits was to determine whether Inc.'s dismissal for Art. III standing might have affected the trial by balancing evidence related to Inc. against the weight of the infringement evidence. *Id.* If the Court had determined that there was insufficient evidence, it surely would have granted VMware's motion for judgment as a matter of law as to IP rather than expending the extraordinary judicial and party resources necessary for a new trial.

#### I. Genuine Disputes of Material Fact Preclude Summary Judgment on the '687 Patent.

# A. VMware's Argument Is Based on an Attempt to Recycle Claim Construction Arguments the Court Already Rejected.

VMware spends pages of its brief, VMware Br. 10-12, trying to make the claims say something they do not and, without saying so, recycling arguments long since rejected or conceded. The claim language is explained in detail above. *Supra* pp. 4-6. Limitation 7[B] requires:

[B] evaluating the placement of said virtual machines in said virtualized environment using said data sets by evaluating each virtual guest against each virtual host and other virtual guests using one or more rule sets pertaining to said technical, business and workload constraints to determine guest-host placements;

'687 patent at 38:64-39:2 (emphasis added). The Court construed the italicized language to mean:

Evaluating each virtual machine against each virtual host and other virtual machines, *in each case* using one or more rule sets pertaining *to each of* technical, business and workload constraints.

D.I. 1160 at 5 (emphasis added). The Court added the italicized language in its 2020 claim construction

ruling. *Id.* The background on why the Court added that language is important because VMware's motion seeks to give these words meanings the Court already rejected.

The post-trial '687 claim construction process was started when, in post-trial motions, VMware argued that Densify had not proved that every VM in DRS had a business rule. *See* D.I. 761 at 2-5. Densify pointed out that the claims do not require VMs to have any type of rule. *Id.* Accordingly, at VMware's request, the Court ordered new claim construction briefing. In that briefing, VMware reversed course, conceding that the claims did not require every VM to have a business rule. D.I. 1109 at 18 (slide 17). In its place, it made three arguments as to the '687 claim language.

*First*, it argued that "each VM requires an association with *all three* of the claimed restraints (i.e., technical, business, and workload)." D.I. 1160 at 6-7. The Court rejected this argument, ruling "that it is information (pertaining to the constraints) contained in the data sets that is associated with the corresponding VM, not the 'constraints' themselves." *Id.* at 7.

Second, VMware sought to change "rule sets" to "rules." D.I. 1115, Ex. A at 19. Densify pointed out that this would fundamentally change the claims' meaning and was not supported by the specification or anything else. D.I. 1114 at 13:4-5, 15:16-16:24. The Court rejected this substitution. D.I. 1160; D.I. 1114 at 41:14-25.

Third, VMware argued that every evaluation a system conducts must meet the claim limitations. D.I. 1114 at 13-15; D.I. 1115, Ex. A at 17. As Densify pointed out, that made no sense—it would mean that if a system evaluated each VM and host with a rule set that included technical, business, and workload rules (as required), it would infringe, but if the same system later conducted another evaluation using only workload rules, it would transform from infringing to noninfringing. *Id*. At the hearing, VMware abandoned this view.<sup>5</sup> The Court correctly rejected this argument because

<sup>&</sup>lt;sup>5</sup> In a footnote, the Court acknowledged VMware's concession "that it is not arguing that *all* 

"the claims at issue are 'comprising' claims, which allow for additional evaluations apart from the claimed evaluation." D.I. 1160 at 9 n.9. Densify ultimately agreed at the hearing with the uncontroversial proposition that the claim simply required that the evaluation accused of infringing must use one or more rule sets pertaining to all three constraints. D.I. 1114 at 50:10-15. It agreed because that is what the claims' plain language says and the interpretation it used at trial. D.I. 1160 at 9; D.I. 1114 at 51:15-23.

VMware's summary judgment argument is premised on these three already-rejected positions. The difference between "rules" and "rule sets" is particularly significant. Requiring an evaluation using one or more *rules* pertaining to the three constraints provides the basis for VMware's noninfringement position. It contends that if a rule is not applied to a particular VM, its product does not infringe. Indeed, VMware's motion is premised on its assertion that the construction "does not allow for skipping the use of *rules* pertaining to any of the three constraint types when evaluating VMs against hosts." D.I. 1440 at 10 (emphasis added). But if it is a "*rule set*" (with the three constraints) that must be used to evaluate the VMs, not "*rules*," then VMware's argument fails because in its product, such a rule set is used to evaluate each and every VM and host in the virtualized environment. The Court was well aware of these stakes when it rejected VMware's argument last time around.

The Court in no way, shape, or form adopted VMware's construction that technical, business, and workload must rules be applied to every VM. VMware strings together snippets from the hearing transcript to argue that Densify conceded the point at the hearing, and therefore the Court now should construe the inconsequential words added in the 2022 construction ruling to implicitly have adopted the substitution of "rules" for "rule sets" that it expressly rejected. In context, what Densify's counsel was arguing was that the claim requires each VM and host to be evaluated with at least one rule set

rule sets used in each evaluation must pertain to all three constraints" and clarified that the Court's construction should not "be read to require this." D.I. 1160 at 9 n.9.

that pertains to each of the three types of constraints. D.I. 1114 at 11:25-12:3, 12:12-16, 13:12-15, 15:10-15, 22:21-23:1, 44:10-22, 50:10-15, 51:15-23. What Densify's counsel agreed to was that "[y]ou have to evaluate each and every VM in the virtualized environment with that rule set." D.I. 1114 at 44:19-22. And the Court understood, summarizing Densify's view as follows: "each evaluation requires one or more rule sets for each of the three constraints." D.I. 1160 at 9 (emphasis omitted). Thus, when the Court added "in each case" and "to each," it changed nothing of substance.

VMware continues to make much of its "spiderweb" diagram. VMware Br. 11. The diagram shows nothing of significance. To start with, the spiderweb drawing shows neither VMware's product nor the claim language. It is a cartoon demonstrative VMware created for this case and showed to Densify's expert Dr. Madisetti at trial. As Densify and Dr. Madisetti understood it, at most it illustrates how a rule set might not have rules pertaining to one of the three constraints.

#### B. Dr. Madisetti Applied the Court's Construction.

VMware first argues that Dr. Madisetti did not discuss the Court's construction in its opening report. This is not a summary judgment issue. Dr. Madisetti has made clear through reports and testimony that the new claim construction did not change his infringement theories—*i.e.*, those theories showed infringement under the new construction. Ex. 217 (Madisetti Ex. 18) at 102; Ex. 218 (Madisetti Ex. 19) at 101; Ex. 219 (Madisetti Ex. 20) at 105; *infra* pp. 37-39. That is his testimony, and whether it was in an initial report is beside the point. Indeed, VMware concedes that it is fully aware Dr. Madisetti's theories have not changed. *See* D.I. 1440 at 8 ("Although Cirba accuses two different versions [of DRS] (1.0 and 2.0), its infringement theory for both is the same.").

And in any event, VMware is incorrect about the opening reports. Dr. Madisetti's opening report stated that the Court's 2022 construction "does not meaningfully change the construction of this term from the Court's prior construction in 2019." DSMF3 ¶ 11. Further, the report shows that he reviewed the Court's claim constructions and applied them in his analysis, including the accompanying

claim charts showing how each limitation is met under the new construction. DSMF3 ¶ 12.

#### C. Questions of Fact Preclude Summary Judgment.

VMware's arguments, VMware Br. 13-16, are premised on the three rejected post-trial claim construction arguments discussed above. Dr. Madisetti opines that each of the products at issue meet limitation 7[B] (and the similar language of claim 3) and gives detailed reasons for his conclusions. DSMF3 ¶ 14. In particular, he explains how VMware's products evaluate each virtual machine against each virtual host and other virtual machines, in each case using one or more rule sets pertaining to each of technical, business, and workload constraints. *Id.* A reasonable jury could credit that testimony.

At bottom, VMware seeks summary judgment based on disputes between the parties' experts concerning how to apply the Court's 2022 claim construction and how the accused products work. That is not what summary judgment is for. *See, e.g., Leggett & Platt, Inc. v. Hickory Springs Mfg. Co.*, 285 F.3d 1353, 1361 (Fed. Cir. 2002) ("[S]ummary judgment is inappropriate where, as here, a case may ultimately turn on the credibility of witnesses"); *Total Containment, Inc. v. Intelpro Corp.*, 217 F.3d 852, at \*4 (Fed. Cir. 1999) (unpublished table decision) (vacating summary judgment where there was "a genuine issue of material fact with specific, plausible and detailed testimony by dueling expert witnesses"). Even VMware has noted the conflict in the experts' testimony. D.I. 1413 ("the parties' experts... offer irreconcilable opinions about how the source code works").

#### 1. There Are Fact Issues for Trial Based on Dr. Madisetti's Infringement Analysis.

VMware seeks summary judgment based on what VMware's expert describes as DRS "skipping" evaluation of VMs against some hosts. VMware Br. 13-14. That is the same theory advanced in Dr. Nieh's 2019 rebuttal expert report, *see* D.I. 1440 at 13, presented at trial, and rejected by the jury, which the Court observed could reasonably have credited all of Dr. Madisetti's testimony. D.I. 575 at 2 ("It seems to me at the moment that the jury could have reasonably credited all of Dr. Madisetti's testimony and opinions."). And it is the same argument VMware made again after trial.

D.I. 761 at 5. It would not make sense for the Court, after hearing all of the trial evidence, to have believed that this theory precluded infringement, only to state the opposite in its post-trial letter, D.I. 575, and not grant judgment as a matter of law on this theory (as VMware requested).

VMware's argument hinges on ignoring Dr. Madisetti's affirmative evidence that VMware's products meet the claim limitations. DSMF3 ¶¶ 14-15. And in particular, that DRS evaluates each VM and host in each case with at least one rule set that pertains to each of the three constraints. *Id.* This evidence demonstrates fact issues precluding summary judgment.

VMware's contrary argument is premised on claim construction arguments already rejected. VMware's "skipping" argument is that it has pointed to an evaluation in which, it alleges, there are not three types of rules being applied. This both incorrectly substitutes "rules" for "rules sets" and incorrectly assumes that if a single evaluation does not infringe, the product does not infringe—the exact arguments the Court rejected. A *rule* does not need to be applied to every VM. All that is required is that each VM and host are evaluated using one or more *rule sets* that pertain to the three types of constraints. Further, that VMware can point to evaluations that are skipped does not in and of itself defeat infringement. Recall that the Court rejected VMware's argument that that *every* evaluation a system conducts must meet the claim limitations. *See supra* pp. 15-16.

In any event, even in VMware's "skipping" example, the claim limitations are met. There,

DRS evaluates the virtualized environment using the rule set, and the rule set pertains to the three

constraints. DSMF3 ¶ 13.

For example,

In that circumstance,

But nonetheless,

the *rule set* pertaining to all three types of constraints is used to evaluate each and every VM. Thus, DRS may find shortcuts in determining guest-host placement, such that

Ex. 216 (Madisetti

Reply) ¶ 39. But this so-called "skipping" does not show noninfringement under the actual claim language. VMware's contrary argument rests on its incorrect premise that the claim requires the underlying technical, business, and workload *rules* to constrain every VM and host, as opposed to *rule sets* being used to evaluate.

In the end, this "skipping" argument is simply an application of the claim to the accused products, which is a question of fact reserved for the jury. VMware has its theory as to why DRS does not factually meet the claims, and Densify has its opposing theory—it is for the jury to decide.

#### 2. Dr. Madisetti's Deposition Testimony Underscores the Fact Issues for Trial.

VMware's argument about Dr. Madisetti's deposition testimony, VMware Br. 14-15, confirms that there are genuine disputes of material fact precluding summary judgment. Again, VMware's argument relies on the incorrect premise that the claims require evaluation based on "rules" as opposed to "rule sets." Dr. Madisetti explained why Dr. Nieh's "skipping" hypothetical does not render VMware's product noninfringing. Ex. 220 (Madisetti Dep.) 101:16-103:19, 216:17-218:9. This testimony is fully consistent with his expert reports. Ex. 216 (Madisetti Reply) ¶¶ 38, 39, 46, 80, 81. What VMware seems to be complaining about is that he used an analogy to illustrate his point and that analogy was not in his expert report. Whether something is in a report or a deposition has nothing to do with summary judgment (either way, it is Dr. Madisetti's testimony). Moreover, experts are not limited at trial to repeating the exact words in their reports like robots. *See nCube Corp. v. SeaChange Int'l, Inc.*, 809 F. Supp. 2d 337, 347 (D. Del. 2011) ("[C]ourts do not require verbatim consistency with the report, but allow testimony which is consistent with the report and is a reasonable synthesis and/or elaboration of the opinions contained in the expert's report." (cleaned up)). Dr. Madisetti was

merely explaining himself in response to VMware's questioning, in a way that was consistent with the theories presented in his report. He had every right to do so.

#### 3. The Specification Does Not Warrant Summary Judgment.

Finally, VMware argues that the '687 patent specification is at odds with Dr. Madisetti's infringement theories. VMware Br. 15-16. VMware cites no case for the proposition that a specification being assertedly inconsistent with expert testimony justifies summary judgment. Summary judgment is about whether the plaintiff's evidence meets the relevant legal standard—here, whether there is evidence from which a reasonable jury could find that VMware's products meet the claim limitations. The specification is used for claim construction, which already occurred. VMware made its arguments as to the specification in the most recent claim construction, and the Court disagreed. *See* D.I. 1094 at 16-18 ("The Specification Supports VMware's Construction").

Anyhow, Densify explained at claim construction why the intrinsic record (including the specification) did not support VMware's request to change "rule sets" to "rules" or any of the other substantial changes it proposed, all of which were rejected. D.I. 1094 at 5-6, 26-27. And VMware's latest specification arguments are attempts to walk back its earlier concessions. *See* D.I. 1160 at 9 n.9. Moreover, VMware ignores the many portions of the specification that support the Court's 2022 claim construction. DSMF3 ¶¶ 1-2.

VMware finishes its discussion of the specification with a quote preceded by "As Judge Stark explained." VMware Br. 16. What it leaves out is that what Judge Stark was explaining was *VMware's position*, not the *Court's ruling*. D.I. 1160 at 8 ("VMware argues that each evaluation must use **one or more rules** for each of the three constraints, such that a claim limitation would not be met where an evaluation skips a rule pertaining to even one of the three constraints." (emphasis added)). By contrast, what the Court ultimately ruled was that each evaluation must use "**one or more rule sets** pertaining to each" of the three constraints. *Id.* at 5 (emphasis added).

#### SUMMARY JUDGMENT NO. 4—PATENT MARKING ('687 PATENT)

#### I. Background

The Densify product practices the '687 patent. VSMF4 ¶ 5. Since March 2015, Densify has continuously conducted a marking program. DSMF4 ¶¶ 3, 7, 11-17, 19-22. In March 2015, Densify published a "Virtual Patent Marking" page on its public website. *Id.* ¶ 11. The webpage states that Densify's product is protected by U.S. patents and includes the relevant patent numbers, including the '687 patent. *Id.* ¶ 15. In every release since March 2015, Densify marked the Help and About splash screens inside the Densify software with the words "Densify Patent Information" and a hyperlink to the Virtual Patent Marking page. *Id.* ¶¶ 19-20. Densify provided additional public notice by including the Virtual Patent Marking web address in its release notes for the product. *Id.* ¶ 23. Densify has clearly and consistently testified that it has marked its products. *Id.* ¶¶ 3-23; Hillier Decl.; Smith Decl.

#### II. Densify's Marking Program Is Adequate.

#### A. Densify Marked Its Product Inside the Software and on the Website.

"[C]ompliance with the marking statute . . . is a question of fact." *Gart v. Logitech, Inc.*, 254 F.3d 1334, 1339 (Fed. Cir. 2001). Marking is required only "to the extent that there is a tangible item to mark." *Am. Med. Sys., Inc. v. Med. Eng'g Corp.*, 6 F.3d 1523, 1538 (Fed. Cir. 1993). Courts have recognized that software presents a distinctive marking challenge and so have acknowledged that it may be marked in "various ways," such as on "a page in the program," *Siemens Mobility Inc. v. Westinghouse Air Brake Techs. Corp.*, 2018 WL 7893901, at \*4 (D. Del. Dec. 17, 2018), or through the website associated with the software, *see IMX, Inc. v. Lendingtree, LLC*, 2005 WL 3465555, at \*4 (D. Del. Dec. 14, 2005).

Densify marked via "a page in the [Densify] program" and the associated website, as this was the most practical option, and there was nothing more tangible available. DSMF4 ¶¶ 2, 4. These markings gave the public notice that the Densify product was patented. *See Am. Med. Sys.*, 6 F.3d at

1538 ("The purpose behind the marking statute is to encourage the patentee to give notice to the public of the patent."). The splash screen provided notice to customers using the product. The website provided notice to customers and others who use the website to download software, register for demos and trials, access instructions, and find additional information about the product. DSMF4 ¶¶ 8-10. Densify's website is integral to everything the single-product company does and is the best point of access for information about the Densify product. *Id.* ¶¶ 8-9. Tellingly, VMware cites no case rejecting marking in software or via a website for a software product.

That Densify provided additional information in product literature further demonstrates its commitment to public notice. VMware's cases are inapposite—they did not have nearly the extensive marking Densify employed. *See, e.g., Metrologic Instruments*, 2004 WL 2851955, at \*21 (finding marking *only* a user manual for a *physical* product insufficient).

#### B. The Contents of Densify's Marking Are Adequate.

Section 287(a) contemplates two types of marking: physical and virtual. Physical marking requires using the word "patent" or "pat." together with the patent number. 35 U.S.C. § 287(a). Virtual marking allows a patentee to substitute the patent number for an internet address of a public webpage "that associates the patented article" with the number. *Id*.

Densify's marking satisfies § 287(a) in both ways. Densify marks its website by including the word "Patent" and the patent numbers associated with Densify's product. DSMF4 ¶ 14. Densify marks the splash screen by including the word "Patent" and providing a hyperlink to a public webpage that associates Densify with the relevant patents. DSMF4 ¶¶ 19-22.

VMware's contention that a hyperlink is not equivalent to a website address is overly formalistic and defies the "practical common sense approach [that] must be taken when dealing with" marking issues. *See Heraeus Electro–Nite Co. v. Midwest Instrument Co.*, 2007 WL 3407128, at \*3 (E.D. Pa. Nov. 14, 2007) (cleaned up) ("The Supreme Court has focused on whether the method of

marking the patented product provided notice, rather than on the precise mechanistic compliance with the statute."). *First*, the internet address appears on the splash screen when a user hovers over the hyperlink, thus fulfilling the literal words of the statute. DSMF4 ¶ 21. And when users click the link, the address appears at the top of the browser. DSMF4 ¶ 22. *Second*, providing a hyperlink in a virtual product does the same thing as providing a website address on a physical product. The hyperlink provides an address and actually makes it easier for the public to access by simply clicking the link. *Third*, hyperlinking embedded the Densify website into the software. DSMF4 ¶ 22; Hillier Decl. ¶ 10 ("[W]hen a user clicks on the hyperlink, it opens a new window in the software displaying the Virtual Marking Page."). Incorporating the physical marking on the Densify website into the splash screens constitutes physical marking of the software itself.

VMware's argument ignores the practical differences between physical and software products. *See Heraeus*, 2007 WL 3407128, at \*3 (requiring a "practical common sense approach" (cleaned up)); *see also Limelight Networks, Inc. v. XO Commc'ns*, LLC, 241 F. Supp. 3d 599, 608 (E.D. Va. 2017) (concluding that there was no obligation to mark software because there was no practically viable way to do so). *A to Z Machining Service, LLC v. National Storm Shelter, LLC*, 2011 WL 6888543 (W.D. Okla. Dec. 29, 2011), is not instructive here and does not address hyperlinks, *see id.* at \*3 (plaintiff failed to include the words "patent" or "pat." on its physical product). And contrary to VMware's assertions, *Arctic Cat Inc. v. Bombardier Recreational Products Inc.*, 950 F.3d 860 (Fed. Cir. 2020), suggests that courts should consider the broader purpose of § 287(a) when interpreting its language, *see id.* at 864-65. Besides, Densify's marking fulfills both the literal language and purpose.

#### C. It Is Immaterial That the License Agreement Did Not Address Marking.

It is immaterial that the License Agreement did not explicitly require marking. VMware's only case is readily distinguishable. In *U.S. Ethernet Innovations, LLC v. Acer, Inc.*, 2013 WL 4456161 (N.D. Cal. Aug. 16, 2013), a third-party licensee did not mark, and the patentee "took no steps

whatsoever" to ensure compliance. *Id.* at \*7-8. Here, the licensee did mark. Gerry Smith, CEO of both the patent owner (IP) and licensee (Inc.), ensured that the marking program stayed in place for the entirety of the license term. DSMF4 ¶ 5; Smith Decl. ¶ 6 ("When I signed the licensing agreement, Inc.'s marking program was already in place. As CEO of both entities, I could ensure that marking program would continue, and I knew Inc. would maintain its marking efforts.").

#### III. Densify's Marking Was Continuous and Supports Pre-Suit Damages.

Contrary to VMware's assertions, Densify has offered ample evidence demonstrating continuous marking since March 2015. Densify's employees have testified or submitted sworn statements describing continuous marking. DSMF4 ¶¶ 6, 11, 19-20; Hillier Decl.; Smith Decl. Densify also produced webpages, product documentation, and splash screens corroborating that testimony. DSMF4 ¶¶ 3, 11-13, 15-17, 19-20. In particular, the 8.2.1 product release notes—published in March 2015—demonstrate that splash screens were "updated to include a link to the Cirba patent information." *Id.* ¶ 19.

There is no exception to ordinary summary judgment practice for testimony about marking. See Sentry Prot. Prod., Inc. v. Eagle Mfg. Co., 400 F.3d 910, 918 (Fed. Cir. 2005) (vacating summary judgment because plaintiffs provided an affidavit stating that "products were marked, together with documents showing sales in that period"); Formax, Inc. v. Alkar-Rapidpak-MP Equip., Inc., 2013 WL 12178064, at \*4 (E.D. Wis. Aug. 29, 2013) (testimony suffices); see also Paladino v. Newsome, 885 F.3d 203, 209 (3d Cir. 2018) ("a single, non-conclusory affidavit or witness's testimony, when based on personal knowledge and directed at a material issue, is sufficient to defeat summary judgment" (attribution omitted)). The lone outlier VMware cites suggests only that "general testimony" that marking was consistent may not suffice, cites no law in support of that suggestion, ultimately relied on an alternative ground instead of that suggestion, and in any event is not precedential. See Contour IP Holding, LLC v. GoPro, Inc., 2020 WL 5106845, at \*7 (N.D. Cal. Aug. 31, 2020).

That Densify offered limited trial testimony regarding marking does not demonstrate a lack of available evidence—it was because VMware did not contest the issue at trial. *See* D.I. 758 at 29:1-12 ("[I]t seems pretty clear [Densify] could have introduced more evidence directed precisely to the arguments" that VMware made in its post-trial briefing on marking). That VMware did not contest marking at trial, provide a jury charge on it, or ask the jury to decide it is why the trial understandably included only cursory evidence. The Court should deny summary judgment.

## **SUMMARY JUDGMENT NO. 5—INDUCED INFRINGEMENT ('687 PATENT)**

VMware's summary judgment motion of no induced infringement is just a condensed rehash of its motion for judgment as a matter of law of no induced infringement. Densify contends (and the previous jury found) that VMware has induced infringement—that is, has induced its customers to infringe. While "[a] finding of inducement requires a threshold finding of direct infringement," Densify need only advance evidence from which a reasonable jury could find that it is "more likely than not [that] one person somewhere in the United States had performed the claimed method using [VMware's] products." *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1318 (Fed. Cir. 2009). That evidence need not be "direct evidence of a specific person doing so." *C R Bard Inc. v. AngioDynamics, Inc.*, 979 F.3d 1372, 1379 (Fed. Cir. 2020).

This is a low bar. "[C]ircumstantial evidence" that would "permit the jury to imply" that there was direct infringement is plenty. *Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings*, 370 F.3d 1354, 1365 (Fed. Cir. 2004). For example, in *C R Bard*, the Federal Circuit held that expert testimony that a claim would typically be performed by an individual or single entity, combined with instructional materials directing customers to infringe, was sufficient. *See* 979 F.3d at 1379-80. And in *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358 (Fed. Cir. 2012), the court held that evidence that the defendant "designed" its product to comply with an infringing standard, advertised that compliance, and provided instructions encouraging (but not requiring) infringement was sufficient, *see id.* at 1364-66.

The record contains significant evidence that VMware's customers directly infringe. Dr. Madisetti explained how VMware customers performed the claimed methods in "hands-on labs" provided by VMware, DSMF5 ¶ 1; how 90% of surveyed VMware customers used VM-Host affinity rules, *id.* ¶ 2; and how customers used vSphere to perform a "hardware refresh" in an infringing manner, *id.* ¶ 3. Dr. Madisetti relied on evidence of "larger customers who were using [VMware's] products"; "telemetry data"; testimony of Densify's CTO, Mr. Hillier; and VMware's own "hands-on labs" to conclude that VMware induced customers to infringe. *Id.* ¶ 5. Confirming Dr. Madisetti's view, VMware Senior Director of Product Management Chandra Prathuri told his colleagues in 2018 that

that . *Id.*  $\P$  6. Mr. Hillier testified . *Id.*  $\P$  7. And there is significant evidence that VMware advertised the infringing features to customers. *Id.*  $\P$  8. While VMware now tries to dismiss its features as "optional," the record confirms their importance to customers; VMware itself was motivated to copy Densify's technology to meet their customers' need for it. *See id.*  $\P$  13; DSMF2  $\P$  14. A factfinder can easily infer from this evidence that the infringing features VMware promoted to customers were in fact used by customers.

And while there is no need to prove every individual customer's infringement, Dr. Madisetti offered exemplary evidence of infringing rule configurations from a specific customer, DSMF5 ¶ 10. VMware argues that the evidence "failed to show that 764 VMs were evaluated against each host and other VMs using rules for the three required constraints," VMware Br. 21, but that view is incompatible with the Court's claim construction. First, VMware's assertion is inconsistent with the Court's construction of the term "virtualized environment," which does not encompass every VM a company operates, only those within the virtualized environment under consideration. *See* D.I. 476;

D.I. 586 at 82:6-9 ("[T]he patentee was not telling a person of ordinary skill in the art to look outside of the existing virtualized environment under consideration when practicing the claims."). And second, the claim language requires evaluation based on "rule *sets*"; it does not require that every rule be applied (*i.e.*, constrain a VM's placement) in every instance. *See supra* pp. 14-17.

is not the only example of a customer's infringement. DSMF5 ¶¶ 11-12. VMware quibbles with a cherrypicked line from Dr. Madisetti's deposition, but Dr. Madisetti was simply making clear that he opined that *VMware* infringed both directly and indirectly Of course Dr. Madisetti opined that directly infringe. *Id.* ¶ 11; RSMF5 ¶¶ 20, 22. That VMware disagrees with Dr. Madisetti does not entitle it to summary judgment.

Next, VMware argues that it did not have intent to induce. That belies the record evidence showing that VMware develops and releases features because customers demand them, DSMF5 ¶ 14, and that it encourages infringement by encouraging customers to use the infringing features, *id.* ¶ 15. The record is also littered with evidence that VMware willfully and egregiously infringed, *supra* pp. 9-13, demonstrating its culpable state of mind. VMware's motion should be denied.

## **DISMISSAL OF INC. AND IP'S '492 PATENT CLAIMS**

# I. Dismissal of IP Is Unnecessary and Wasteful.

Inc. and IP initially sued VMware for infringement of the '687 and '367 patents, among other claims. Six months later, VMware sued Inc. in a separate case, and then Inc. and IP together asserted a counterclaim for infringement of the '492 patent. No. 20-272, D.I. 75. The counterclaim pleading is crystal clear that both Inc. and IP asserted the claim for infringement of the '492 patent:

## **DENSIFY'S COUNTERCLAIMS**

Plaintiffs Cirba, Inc. (d/b/a Densify) **and Cirba IP, Inc**. (collectively, "Densify") file this Second Amended Complaint . . . and respectfully allege as follows . . . .

*Id.* at 34 (emphasis added). VMware itself joined in filing a scheduling order in which it (and Densify)

represented to the Court that IP had asserted the '492 patent:

[T]he consolidated actions includ[e] the following pending claims and counterclaims: . . .

• Cirba IP's and Cirba Inc.'s counterclaims against VMware for infringement of Patent No. 10,523,492....

D.I. 962 at 1-2. The Court entered that scheduling order, acknowledging IP as the co-plaintiff on the '492 patent. *See* D.I. 968; D.I. 1003 (entering schedule); D.I. 1489 ("Cirba IP's and Cirba Inc.'s counterclaims" (emphasis added)). Moreover, VMware represented to the Court in letter briefing that "Cirba[, defined to include Inc. and IP,] counterclaimed for infringement of U.S. Patent No. 10,523,492 ("the '492 patent") on March 23, 2020." D.I. 983 at 1. VMware took extensive discovery on IP's (and Inc.'s) '492 patent claim. Indeed, as recently as February 2022, the Court issued an order recognizing that IP had submitted a claim for infringement of the '492 patent. D.I. 1160 (claim construction order).

VMware now claims that IP must be dismissed because, in VMware's view, it was never properly joined in the case for the '492 patent. This is absurd. It is the epitome of elevating form over substance. Everyone—including VMware—has always known that IP asserted a claim for infringement of the '492, as was expressly stated in the initial counterclaim pleading. D.I. 75 at 34. VMware waited to the end of the case to spring forward and claim that IP actually is not in the case as to the '492 after it told the Court it was. It has forfeited its joinder complaint time and again. Further, it would be a waste of the Court's (and the parties') resources to have IP sue VMware all over again and start from scratch when the case is so far along.

The law easily embraces IP's status as a party. "The majority of district courts appear to take the position that a Rule 13(h) joinder of parties to a counterclaim does not require leave from the court." *Transcon. Corp. v. Hyde*, 2009 WL 10710118, at \*6 (D. Nev. June 23, 2009) (collecting cases). VMware cites cases about Article III standing to suggest that Inc. "could not join IP" to cure Inc.'s standing defect. VMware Br. 26. But the '492 counterclaim was—in the first instance—brought by

IP and Inc. together; joinder was not used to correct a previously existing claim.<sup>6</sup>

## II. Inc. Has Standing.

VMware seeks dismissal of Inc. from the case on the basis of "standing." VMware Br. 25. The "irreducible constitutional minimum of standing" is "a concrete and particularized 'injury in fact' that is fairly traceable to the challenged action of the defendant and likely to be redressed by a favorable judicial decision." *Lexmark Int'l, Inc. v. Static Control Components, Inc.*, 572 U.S. 118, 125 (2014) (quoting *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560 (1992)). Inc. had Article III standing from the outset because it alleged a concrete harm fairly traceable to infringement of the '492 patent. *See, e.g.*, D.I. 1239 at 18-19 (citing voluminous evidence); D.I. 1242 ¶¶ 18-20; D.I. 1243 ¶¶ 6-13. Inc. was ... *See,* 

e.g., D.I. 1242  $\P$  8. It was injured by VMware's infringement.

It used to be that an exclusive license meeting the statutory prerequisites of the Patent Act—
i.e., conferring "exclusionary rights"—was required to establish Article III standing, but this is no longer the case after *Lexmark*. *Lone Star* recognized that *Lexmark* abrogated decades of precedent on "standing" in patent cases, which had treated the Patent Act's requirements and Article III's as coextensive. *Lone Star Silicon Innovations LLC v. Nanya Tech. Corp.*, 925 F.3d 1225, 1235-36 (Fed. Cir. 2019). In reaffirming *Lone Star*, the Federal Circuit stated that "decisions treating the prerequisites of the Patent Act as jurisdictional were wrong." *Schwendimann v. Arkwright Advanced Coating, Inc.*, 959 F.3d 1065, 1071 (Fed. Cir. 2020). Indeed, in *Schwendimann*, the plaintiff had no rights to the patents she asserted, but because she alleged harm, the Federal Circuit held that there was no Article III problem. *Id.* at 1071. Accordingly, Inc. has always had Article III standing.<sup>7</sup>

<sup>&</sup>lt;sup>6</sup> As the Court is aware, Inc. and IP have amalgamated into a single entity, Cirba Inc. D.I. 1396 at 3. That combined entity succeeds to all rights held by both Inc. and IP. *Id.* at 8; D.I. 1242 at ¶ 17.

<sup>&</sup>lt;sup>7</sup> Inc. recognizes the Court previously ruled Inc. did not have Article III standing to assert the

At most, VMware has asserted the lack of a statutory prerequisite—namely the lack of "exclusionary rights" based on the initial license from IP to Inc. Such statutory prerequisites (sometimes called "statutory standing"), unlike Article III standing, can be cured after the case is filed. *Schwendimann*, 959 F.3d at 1068-75 (affirming correction of statutory standing with reformation). Here they indisputably have been. *See* D.I. 1239 at 9-10; D.I. 1319, Ex. 33. Accordingly, Inc. is properly joined in this case as to the '492 patent.

## VMWARE'S § 101 DEFENSE SHOULD BE REJECTED (AGAIN)

VMware tried twice to invalidate Densify's patents under § 101, on motions nearly identical to this one. The Court rejected both attempts. D.I. 137-138 ('687 patent); No. 20-272, D.I. 97 ('492 patent). VMware's third § 101 challenge also fails.

# I. Estoppel Bars VMware's § 101 Motion on the '459 Patent.

VMware petitioned the PTO for post-grant review of the '459 patent, arguing that the claims are invalid for lack of written description under 35 U.S.C. § 112. Ex. 312 at 1. Last week, the PTAB issued a final written decision finding all claims unpatentable under § 112. Ex. 313. Because that decision triggered estoppel under 35 U.S.C. § 325(e)(2), VMware is now barred from arguing that the '459 patent is invalid under § 101.

A post-grant review petitioner can challenge a patent on any statutory invalidity ground, including §§ 101, 102, 103, and 112. 35 U.S.C. § 321(b). Once the PTAB issues a final written decision, regardless of the outcome, the petitioner is estopped from asserting in district court that the same patent is "invalid on any ground that the petitioner raised or reasonably could have raised during" the post-grant review. *Id.* § 325(e)(2); *see Intuitive Surgical, Inc. v. Ethicon LLC*, 25 F.4th 1035, 1041

<sup>&#</sup>x27;687 and '367 patents. The Court did not have the benefit of these arguments when it reached that ruling because of the truncated briefing preceding it, and on mandamus, the Federal Circuit did not reach this question in light of the high mandamus standard. That this issue arises as to a different patent affords the Court the opportunity to address it anew.

(Fed. Cir. 2022). Section 325(e)(2) estoppel is broad, and courts have followed the statute's command that it applies to anything that "reasonably could have been raised," even if not actually raised. *See, e.g., Olaplex, Inc. v. L'Oreal USA, Inc.*, 855 F. App'x 701, 714 (Fed. Cir. 2021). The point "is to prevent parties from pursuing two rounds of invalidity arguments before the PTAB and the district court. A looser interpretation would allow, if not encourage, petitioners to hold back invalidity grounds from a PTAB review to avoid estoppel, in direct contradiction to the statute and the policy behind it." *GREE, Inc. v. Supercell Oy*, 2019 WL 5677511, at \*4 (E.D. Tex. Oct. 30, 2019) (citation omitted). The decision does not, however, prevent the patent owner from continuing to litigate claims found invalid until final judgment by the Federal Circuit. *TrustID, Inc. v. Next Caller Inc.*, 2021 WL 3015280, at \*4 (D. Del. July 6, 2021).

There is no question that VMware could have raised its § 101 arguments in its petition. It had already pleaded a § 101 defense in this case at the time of its petition. D.I. 1009 at ¶ 138. Having opted not to raise that argument at the PTO, VMware is now estopped from doing so here.<sup>8</sup>

## II. The Court Already Found That the '687 Patent Is Eligible Under § 101.

This is VMware's third attempt to knock out the '687 patent on § 101. This has already been thoroughly litigated, and given space constraints and to not burden the Court, Densify will not repeat its arguments in full. *See* D.I. 91. VMware's motion here challenges only claim 3 (not claim 7).

VMware filed its first § 101 challenge against the '687 patent in July 2019. D.I. 79-80; see also D.I. 91; D.I. 101. There, VMware argued that the '687 patent claims are "directed to the abstract idea of collecting and analyzing information[.]" D.I. 80 at 1. The Court denied the motion, finding that the claims are "directed to improving computer functionality" and "to the design of virtual

<sup>&</sup>lt;sup>8</sup> Densify informed VMware in August that estoppel would take effect by December 10, 2022, Ex. 314 at 3-5, but VMware pressed forward with this motion anyway. It then refused to withdraw its now-estopped motion, Ex. 315, forcing Densify to waste pages of its brief responding.

environments to optimize the placement of virtual machines on servers... through a specific technique," and "are not directed at an abstract idea." D.I. 138 at 201:7-25.

That should have ended the matter, but VMware raised the § 101 issue a second time on the eve of the January 2020 trial, this time as to both claims 3 and 7. D.I. 439 ¶ 74. The Court refused to allow VMware to present its eligibility defense to the jury, noting that "the Court has already ruled on and found no merit to that defense (*see* D.I. 137)." D.I. 460 ¶ 17. VMware concedes that the Court rejected its § 101 challenge as to claim 3, but it suggests (without support) that "to the extent that is incorrect," the Court should revisit its ruling. VMware Br. 26 n.5. But VMware provides no reason for the Court to revisit its rulings correctly finding the '687 patent eligible at Step 1, D.I. 138 at 201-02, and rejecting VMware's earlier attempt to relitigate this issue, D.I. 460 ¶ 17.

Anyhow, claim 3 easily meets the § 101 standard for the reasons the Court already stated. The '687 claims are directed to "improving computer functionality and not directed to an abstract idea." D.I. 138 at 201:13-15. VMware nonetheless argues that claim 3 claims an abstract idea because it requires "analyzing said virtual guests and hosts based on technical, business and workload constraints[.]" VMware Br. 32. But that was the very basis of the Court's decision that the claims are *not* directed toward abstract ideas. D.I. 138 at 201:16-22 ("Optimization is achieved through a specific technique, evaluating each virtual machine against each server and other virtual machines based on technical[,] business[,] and workload constraints..."). VMware's evocation of the Court's later construction of the '492 and '459 patents to cover "hypothetical computer systems" is irrelevant; those constructions do not apply to any terms in the '687 patent.

## III. The '459 Patent Is Eligible Under § 101.

As noted, estoppel prevents the Court from reaching the merits of VMware's §101 motion as to the '459 patent. *Supra* pp. 31-32. Because VMware refused to withdraw its motion, out of an abundance of caution, Densify briefly summarizes why VMware's § 101 defense is meritless.

On a Rule 12(c) motion, the Court must "view the facts presented in the pleadings and the inferences to be drawn therefrom in the light most favorable to the nonmoving party." *Rosenau v. Unifund Corp.*, 539 F.3d 218, 221 (3d Cir. 2008).

**Step 1.** The Federal Circuit and Supreme Court "have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous cases." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). Here, the Court already found that the '687 and '492 patents are eligible at Step 1. D.I. 137 ('687); No. 20-272, D.I. 96 ('492). The same reasoning, supported by Federal Circuit law, easily resolves VMware's third § 101 challenge.

The '459 patent is a continuation of the '492 patent. Like the '492 patent, the '459 patent's claims are directed not to abstract ideas, but to an "improvement in the design of computer environment[s] through improved placement of computer systems, including virtual machines, using compatibility analyses[.]" No. 20-272, D.I. 97 at 4. Both patents recognize that conventional systems could not holistically optimize complex computing designs with dynamic, multidimensional environments, and instead relied on restrictive assumptions to avoid the need to do a full analysis. D.I. 992 ¶ 26; see also '459 patent at 2:51-60; '492 patent at 2:49-58 (recognizing there are "virtually infinite number" of system combinations that "make choosing appropriate consolidation solutions difficult, error prone, and time consuming"). The '459 patent solves these problems by evaluating compatibility between a specific source system and a specific target system using rules that operate against those systems' attributes or data. D.I. 992 ¶ 85. The Court found this type of invention eligible when considering the '492 patent; the same result is appropriate here. No. 20-272, D.I. 97 at 4.

The Federal Circuit precedent the Court relied on, and more recent precedent in the same vein, makes clear that software-based innovations can make non-abstract improvements to computer technology when they are focused on "an improvement in computer functionality itself, not on

economic or other tasks for which a computer is used in its ordinary capacity." *See Enfish*, 822 F.3d at 1336. Densify's patents do just that. Like the Court found for both the '492 and the '687 patents, *see* No. 20-272, D.I. 97 at 4; D.I. 138 at 202:1-5, the '459 patent fits squarely within *Enfish* and more recent precedent. Claim 1 describes specific steps for determining placement of source computer systems onto target computer systems using a detailed compatibility analysis that evaluates rules based on attributes or data about the systems, overcoming a problem in computer environments and allowing users to design computer environments in a new way. This invention is patent eligible. *See, e.g., Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1305 (Fed. Cir. 2018); *see also Packet Intelligence LLC v. NetScout Sys., Inc.*, 965 F.3d 1299, 1309 (Fed. Cir. 2020) (holding that claims reciting specific steps to refine data flow in a network environment were patent eligible); *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1009 (Fed. Cir. 2018) (specific manner of navigating a spreadsheet).

VMware's attempt to distinguish the Court's previous § 101 rulings is based on the argument that the Court had not yet construed the claims, and that the Court's construction of "source computer system" in the '459 patent somehow converted the claims from eligible to ineligible. Construing "source computer system" to mean "a physical, virtual, or hypothetical system from which applications and/or data are moved or are to be moved" does nothing to make the claims ineligible. D.I. 1160. The '459 patent, like the '492 patent, is about "computer systems," and there is nothing inconsistent between these positions. The Court and the patents are clear that just because a "system" can be "physical, virtual, or hypothetical" does not change the fact that the systems are still "computer systems"—it is even part of the claim. '459 patent claim 1; see also No. 20-272, D.I. 97 at 3-4; '459 patent title ("Method and system for determining compatibility of computer systems" (emphasis added)); '459 patent at 2:66-3:35, 6:29-34, fig. 1 (specification using "computer systems" more than 20 times). The '459 patent teaches that hypothetical systems may be used to model systems in

computer environments, *id.* at 5:65-6:33; these systems may be utilized in the claimed evaluations to improve the functioning of the computing environments and are not abstract ideas.

Step 2. The Court need not reach *Alice* Step 2 if it determines at Step 1 that the challenged claims are not abstract, *Enfish*, 822 F.3d at 1339. The Court previously found both the '687 and '492 patents eligible at Step 1, making Step 2 unnecessary. No. 20-272, D.I. 97 at 7; D.I. 138 at 202:6-7. Here, if the Court reaches Step 2, the '459 patent claims also satisfy it: "[D]etermining a placement" of source systems on target systems represents an "inventive concept." The complaint describes in detail how this is true—complex, computer-based evaluations of rules to determine placement is a specific way of designing computing environments and an improvement to conventional systems. *See* D.I. 992 ¶¶ 82-88 ('459 patent); D.I. 68 ¶¶ 61-68 ('687 patent).

Further, whether the claims contain an inventive concept is a factual issue, *see*, *e.g.*, *Aatrix Software*, *Inc.* v. *Green Shades Software*, *Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018), and the complaint's "plausible factual allegations that the claims include inventive concepts" are enough to defeat a Rule 12 motion, *see Coop. Ent.*, *Inc.* v. *Kollective Tech.*, *Inc.*, 50 F.4th 127, 136 (Fed. Cir. 2022); *see also Weisner v. Google LLC*, 51 F.4th 1073, 1088 (Fed. Cir. 2022). Here, the allegations in the complaint at a minimum create fact issues that cannot be resolved in VMware's favor on a Rule 12 motion, and the motion must be denied on that basis alone.

## STANDARD FOR MOTIONS TO EXCLUDE EXPERT TESTIMONY

In assessing reliability, courts consider whether the expert "will help the trier of fact to understand the evidence or to determine a fact in issue," "the testimony is based on sufficient facts or data," "the testimony is the product of reliable principles and methods," and "the expert has reliably applied the principles and methods to the facts of the case." Fed. R. Evid. 702(a)-(d); *see Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 593 (1993). If an expert's "methodology is sound, and the evidence relied upon [is] sufficiently related to the case at hand," then "disputes about the degree of

relevance or accuracy (above this minimum threshold) may go to the testimony's weight, but not its admissibility." *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831, 852 (Fed. Cir. 2010), *aff'd*, 564 U.S. 91 (2011). This is because "*Daubert* and Rule 702 are safeguards against unreliable or irrelevant opinions, not guarantees of correctness." *Id.* at 854. Credibility and correctness are "question[s] for the fact finder, not the court." *Summit 6, LLC v. Samsung Elecs. Co.*, 802 F.3d 1283, 1296 (Fed. Cir. 2015). *Daubert* decisions are reviewed for abuse of discretion. *Oddi v. Ford Motor Co.*, 234 F.3d 136, 146 (3d Cir. 2000).

## RESPONSE TO MOTION TO EXCLUDE EXPERT TESTIMONY (DR. MADISETTI)

The Court rejected VMware's attempt to exclude Dr. Madisetti's testimony before the 2020 trial. D.I. 476. As before, VMware does not challenge Dr. Madisetti's qualifications. Nor could it; he is a chaired, tenured professor of electrical and computer engineering at the Georgia Institute of Technology. VMware's motion rehashes the same types of arguments rejected before, all of which go to weight, not admissibility.

#### I. Dr. Madisetti Applies the Court's 2022 Construction.

# A. Dr. Madisetti Explains How VMware Uses "Rule Sets."

VMware seeks to exclude all of Dr. Madisetti's opinions on the ground that he did not address the Court's 2022 claim construction on the '687 patent. In fact, he expressly addressed the new construction. He made clear his view that the Court's 2022 construction changed nothing of substance—it was how he had already been applying the claim language. Dr. Madisetti explained this view in his opening report. Ex. 217 (Madisetti Ex. 18) at 102 ("The Court's [February 24, 2022] construction, which agreed with Densify's position (*see* D.I. 1160 at 8) does not meaningfully change the construction of this term from the Court's prior construction in 2019, (*see* D.I. 356 at 4-6; D.I. 357 at 1)."). Then when Dr. Nieh said in his rebuttal report that the accused products do not meet the claim requirements, Dr. Madisetti responded. Ex. 216 (Madisetti Reply) ¶¶ 34-35, 37-42. He again

explained his views at his deposition. Ex. 220 (Madisetti Dep.) 92:7-11. Indeed, VMware has conceded that his theories are the same for the older products and the newer products. D.I. 1440 at 8 ("Although Cirba accuses two different versions [of DRS] (1.0 and 2.0), its infringement theory for both is the same."). That Dr. Madisetti considered and applied the Court's claim construction disposes of VMware's *Daubert* challenge. *Vehicle IP, LLC v. AT & T Mobility LLC*, 227 F. Supp. 3d 319, 326 (D. Del. 2016) (denying *Daubert* motion where expert applied claim construction because movant's objection went to the weight, not admissibility).

In substance, VMware's complaint is not really that Dr. Madisetti failed to consider the claim construction, but that it disagrees with how he applied the construction to its products. That is no reason to exclude expert testimony—those disagreements go to weight, not admissibility, and are for the jury to resolve. *Int'l Rectifier*, 361 F.3d at 1369 ("Comparison of the claims to the accused device requires a factual determination that every claim limitation or its equivalent is found in the accused device."); *Philips Elecs.*, 312 F. Supp. 2d at 644-45 ("[A]pplication of the claim to the accused product[] is a question of fact."); *EMC Corp. v. Pure Storage, Inc.*, 154 F. Supp. 3d 81, 109 (D. Del. 2016) ("Expert testimony regarding whether an accused device falls within the scope of a court's claim construction is appropriate and raises a factual issue for the jury to resolve."); *Align Tech., Inc. v.* 3Shape A/S, 2021 WL 534903, at \*2 (D. Del. Feb. 12, 2021).

VMware's *Minerva* case, D.I. 1440 at 39, is no help. In that case, the expert relied only on one of two material limitations under the court's construction, advancing infringement under a doctrine of equivalents analysis. *Minerva Surgical, Inc. v. Hologic, Inc.*, 2021 WL 3048447, at \*8-9 (D. Del. July 20, 2021). Dr. Madisetti does not ignore the Court's construction or address only "the general presence of technical, business, and workload constraints," D.I. 1440 at 40. VMware simply disagrees with his application of the construction, which is not a basis for exclusion.

VMware's motion is premised on convincing the Court that the 2022 construction changed the claims' meaning since the first trial. As explained, it changed nothing of substance. *Supra* pp. 15-17.

Dr. Madisetti's expert reports thoroughly explain why VMware's products meet the claim limitations, including the each-to-each and "rule sets" limitations. Ex. 215 (Madisetti Vol. 2), ¶¶ 120-22, 132, 138, 144, 150, 152; Ex. 217 (Madisetti Ex. 18) at 102-199; Ex. 218 (Madisetti Ex. 19) at 101-196; Ex. 219 (Madisetti Ex. 20) at 105-205. He explained further at trial and his depositions. TT 482:20-507:6, 517:4-522:21, 531:5-539:23, 1614:2-17; Ex. 202 (Madisetti July 2019 Dep.) 170:1-14; Ex. 205 (Madisetti Dec. 2019 Dep.) 51:7-58:17; Ex. 220 (Madisetti 2022 Dep.) 180:22-181:23. Again, what VMware disagrees with is the *application* of the claims to the products, which is for the jury.

Finally, VMware says that Dr. Madisetti relies on the function in a manner that it does not believe shows infringement. VMware Br. 39. This recycles the same argument from VMware's pending motion to strike. *See* D.I. 1494. And it is precisely the type of dispute between experts that VMware wanted the Court to appoint a technical advisor to resolve. The Court correctly denied that request, recognizing that "evaluating evidence and making credibility determinations are quintessential functions of a jury." D.I. 1490.

#### B. Disagreement With an Infringement Theory Is No Basis for Exclusion.

VMware next contends that Dr. Madisetti disclosed a "new" infringement theory at his deposition that "contradicts" the Court's 2022 claim construction. VMware Br. 40-42. This is really a repeat of its summary judgment motion regarding its "skipping" theory. *See supra* pp. 18-20. A defendant's belief that the evidence an expert provides does not meet the claim limitations is not a question of reliability, but rather of sufficiency of the evidence, and so a *Daubert* motion on this subject should be denied. *See In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 744 (3d Cir. 1994) ("This does not mean that plaintiffs have to prove their case twice—they do not have to demonstrate to the judge by a preponderance of the evidence that the assessments of their experts are *correct*[;] they only have

to demonstrate by a preponderance of evidence that their opinions are reliable.").

Anyhow, Dr. Madisetti's theory is not new. It is merely elaboration on his disclosed theories in reply to Dr. Nieh's rebuttal noninfringement arguments concerning "skipping." Ex. 216 (Madisetti Reply) ¶ 39. That is fair game. *nCube*, 809 F. Supp. 2d at 347 ("verbatim consistency with the report" not required); *id.* ("A key consideration when determining whether testimony is beyond the scope of an expert report is whether the objecting party had notice of the subject matter of the testimony based on the contents of the report and elaborations made during any deposition testimony."). Further, this only came up because Dr. Nieh offered a noninfringement theory as to "skipping," and Dr. Madisetti explained in reply why he disagreed, Ex. 216 ¶¶ 38, 39, 46, 80, 81, and then elaborated in answering VMware's questions at his deposition. Ex. 220 (Madisetti Dep.) 101-103, 217-218.

What is more, Dr. Madisetti's deposition testimony is consistent with the 2022 construction. As discussed, VMware mischaracterizes the 2022 construction, including by swapping "rules" for "rule sets" and reading "pertaining to" out of the claim limitation. *See supra* pp. 15-17. The Court concluded its 2022 opinion construing the each-to-each limitation by stating that "a POSA would understand *each* required evaluation must use one or more rule sets pertaining to all three constraints in order to satisfy the claim," noting VMware's concession that it was "not arguing that *all* rule sets used in each evaluation must pertain to all three constraints," and clarifying that "[n]or should the Court's construction be read to require this." D.I. 1160 at 9 n.9. VMware twists Dr. Madisetti's deposition testimony into a "disavowal" of his trial testimony, but all he said was that he "did not agree that [the spiderweb diagram] represents the claims." Ex. 220 (Madisetti Dep.) 188:14-18. He was correct. It represents neither the claims nor VMware's product—it is just a cartoon trial demonstrative.

## II. Dr. Madisetti Does Not Advance a New Claim Construction of "Virtual Guest."

VMware argues that its vSphere 7 Update 1 and later products do not infringe because they incorporate what VMware identifies as "vCLS VMs" that it says are not evaluated. Dr. Madisetti's

analysis, including his review of VMware's source code, shows that these administrative system VMs are not virtual guests within the meaning of the '687 claims, and are in any event evaluated using technical, business, and workload constraints for host-based placement as required by the '687 claims. Ex. 215 (Madisetti Vol. 2) ¶¶ 185, 195; Ex. 216 (Madisetti Reply) ¶¶ 72-75. VMware's dispute is with the application of the claim construction, which is a fact question for the jury.

VMware argues that the Court's prior construction of "each virtual guest" to have its "plain meaning" precludes Dr. Madisetti's testimony concerning what VMware calls "vCLS VMs." Not so. The discussion cited by VMware is directed to the parties' dispute about the scope of the "virtualized environment" in which virtual guests and virtual hosts need be evaluated to satisfy the asserted claims. See D.I. 356 at 5-6. That VMware labeled something that is not a "virtual guest" within the meaning of the claims as a "VM" does not transform it into a VM, any more than labeling a banana a VM would make it one. VMware's attempt to avoid infringement by adding nonessential components and sticking misleading labels on them sets up a fact issue for the jury, not a Daubert problem.

# III. Dr. Madisetti's Source Code Opinions Will Not Mislead or Confuse the Jury.

#### A. Dr. Madisetti Simply Disagrees with Dr. Nieh's Interpretation of the Source Code.

VMware complains that Dr. Madisetti does not articulate specific disagreements with Dr. Nieh regarding the accused product source code. D.I. 1440 at 44. This complaint boils down to VMware's assertion that it disagrees with Dr. Madisetti's source code opinions and that he did not explain them to its liking. VMware is free to cross-examine Dr. Madisetti on these points at trial. *Tarkus Imaging, Inc. v. Adobe Sys., Inc.*, 2012 WL 12904235, at \*1 (D. Del. June 14, 2012) ("Any deficiencies in [an expert's] analysis or ability to understand the source code are issues of weight and credibility—to be determined by the jury—rather than admissibility.").

Dr. Madisetti's reports explain in great detail his disagreements with Dr. Nieh concerning the source code. Ex. 216 (Madisetti Reply) ¶ 39 (discussing how source code shows that "DRS continues

to evaluate each VM against each host and other VMs" as required by the claims); *id.* ¶ 43 (disagreeing with Dr. Nieh's contention that "many of the source code functions that were used in DRS 1.0 are no longer used in DRS 2.0" and noting that Dr. Nieh "does not list or otherwise identify the functions . . . allegedly no longer used in DRS 2.0"); *id.* ¶¶ 77-79 (discussing disagreements with Dr. Nieh about evaluating VMs against other hosts or VMs using rule sets pertaining to workload constraints when VM-VM affinity rules are defined); *see also* DSMF3 ¶ 15. VMware tries to manufacture grounds for exclusion by selectively quoting (and mischaracterizing) Dr. Madisetti's deposition testimony and faulting him for not addressing its questions about hundreds of thousands of lines of source code on the spot to their liking. These deposition tricks do not disqualify an expert. *Shire Viropharma Inc. v. CSL Behring LLC*, 2021 WL 1227097, at \*30 (D. Del. Mar. 31, 2021) (denying *Daubert* motion where the movants "significantly mischaracterize[d]" an expert's testimony by taking deposition quotes out of context). Moreover, VMware cites no case requiring a paragraph-by-paragraph rebuttal or recitation of every disagreement between experts concerning source code to survive a *Daubert* motion.

# B. VMware's "Objectively Wrong" Point Is Self-Evidently for the Jury.

Finally, VMware contends that Dr. Madisetti's source code opinions are "objectively wrong." VMware Br. 45-46. This unsupported attorney argument only highlights the factual disputes between the parties' experts as to how the accused VMware products operate and is no reason to exclude Dr. Madisetti's testimony. Unsurprisingly, VMware cites no case for this remarkable proposition, instead citing *Parallel Networks* for the general requirement of a "reliable methodology in the analysis and an adequate 'fit' between the offered expert opinion and the facts at issue." D.I. 1440 at 46. Indeed, VMware seeks the extraordinary remedy of excluding *all* of Dr. Madisetti's source code opinions, *see* D.I. 1422, based on a single quibble: "[w]hether DRS 2.0 calls ..."

D.I. 1440 at 46. Over one supposed error, it wants to strike all of the hundreds of pages of source code analysis and testimony Dr. Madisetti provided on unrelated subjects. That request is baseless.

All the more so because VMware's premise is incorrect. Its argument rests on its assertion that "DRS 2.0 does not call "But it does. Even VMware's expert admits that DRS does, in fact, call this function. Ex. 221 (Nieh Rebuttal) ¶ 130 (" is only called in the context of "Incompared to the Court, it appears to be attempting to draw a distinction between what it labels " as opposed to " within DRS 2.0. What VMware ultimately chooses to label its software makes no difference to infringement—what matters is the function. Is part of DRS 2.0, so VMware's premise is wrong. But in any event, that fact is for the jury to decide.

## MOTION TO EXCLUDE EXPERT TESTIMONY (MR. BERGMAN)

VMware already sought to exclude Mr. Bergman's opinions based on substantially the same arguments. D.I. 417 at 10-11. The Court denied that *Daubert* motion. D.I. 467 at 2-3. VMware sought summary judgment on many of these same bases, D.I. 367, and the Court determined that there was not enough merit to even permit full briefing. D.I. 367 at 2-3; Ex. 316 at 69:20-70:17. After hearing all the evidence at trial, the Court stated: "My current inclinations are to deny all requested relief with respect to infringement, invalidity, and damages for both the '687 and '367 patents . . . . [T]he jury could have reasonably credited all of Densify's expert's testimony and opinions." D.I. 575. Then VMware tried again in its post-trial brief. D.I. 602. While the Court did not rule on that motion, it nonetheless ordered a new trial, which would have been an incredible waste of resources if IP had failed to present a cognizable damages theory. Mr. Bergman's reasonable royalty theories have not changed. All that has changed is reassignment of this case, which VMware takes as an opportunity to recycle its arguments again. Mr. Bergman's 340+ page analysis is thorough, rigorous, and detailed, unlike in the cases VMware cites. Ex. 317 (opening report); Ex. 318 (reply).

# I. Mr. Bergman Reasonably Correlates '687 DRS Damages to Infringing Uses.

VMware contends that Mr. Bergman did not correlate DRS damages for infringement of the '687 patent to uses by customers. VMware Br. 47-48; D.I. 1438. Based on this same argument on the same damages theory, the Court rejected VMware's previous *Daubert* motion. D.I. 417 at 10-11 (motion); D.I. 467 at 2-3 (decision). The Court concluded that "VMware's arguments regarding whether Mr. Bergman's calculations properly account for actual infringing use go to weight, not admissibility" because "Mr. Bergman may reasonably be found to have accounted for actual infringing use in his royalty rate analysis." D.I. 467 at 2-3.

Mr. Bergman's analysis is well within the Federal Circuit's guidance. In *Lucent Techs., Inc. v. Gateway, Inc., supra*, the defendant made basically the same argument VMware makes here: that "for method claims . . . damages [must] be limited to the proven number of instances of actual infringing use." 580 F.3d at 1323-24. The Federal Circuit disagreed, explaining that it has "never laid down any rigid requirement that damages in all circumstances be limited to specific instances of infringement proven with direct evidence." *Id.* at 1344. That rule would be "far-removed from what parties regularly do during real-world licensing negotiations," in which the value of a technology is not "limited to the number of times a patented feature is used by a consumer" but also includes the value of "having the patented invention available for use." *Id.* Instead, damages for method claims need only be "correlated, in some respect, to the extent the infringing method is used by consumers." *Id.* 

As such, contrary to VMware's suggestion, plaintiffs asserting method claims are not required to "demonstrate a one-to-one correspondence between units sold and directly infringing customers." *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*, 1 F. App'x 879, 884 (Fed. Cir. 2001). Correlation need not take the form of a quantitative accounting of exactly which customers used the features. *See, e.g., SRI Int'l Inc. v. Cisco Sys., Inc.*, 254 F. Supp. 3d 680, 714 (D. Del. 2017) (allowing all sales to be included in royalty base despite evidence that about a third of customers did not use the

patented feature), aff'd in relevant part, 930 F.3d 1295 (Fed. Cir. 2019); Intellectual Ventures I LLC v. Symantec Corp., 234 F. Supp. 3d 601, 610-11 (D. Del. 2017) (denying summary judgment despite defendant's demand that the plaintiff "quantify the number of customers" who used the infringing features), aff'd, 725 F. App'x 976 (Fed. Cir. 2018); Sentius Int'l, LLC v. Microsoft Corp., 2015 WL 451950, \*11 (N.D. Cal. Jan. 27, 2015) (allowing expert to "apply a royalty to each accused product without showing that someone has used the accused features in each product sold" because "circumstantial evidence of demand and use" is sufficient). Moreover, the Federal Circuit has rejected VMware's suggestion that usage must be accounted for in the royalty base instead of the rate. Exmark Mfg. Co. v. Briggs & Stratton Power Prods. Grp., 879 F.3d 1332, 1348 (Fed. Cir. 2018).

VMware's cases are not to the contrary. *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 576 F.3d 1348 (Fed. Cir. 2009), holds only that a plaintiff must show the accused product "actually perform[s] the patented method," *id.* at 1359; it does not require evidence of the volume of infringing use. *Niazi Licensing Corp. v. St. Jude Medical S.C.*, 30 F.4th 1339 (Fed. Cir. 2022), is very different from the situation here. There, the expert did not even attempt to value the benefits of practicing the patented method and failed to identify any evidence about the value of the claimed method, analyze usage, or explain why determining precise usage was impractical. *Id.* at 1357. Mr. Bergman did each of the things the expert in *Niazi* failed to do. *See, e.g.*, Ex. 317 (Bergman Report) § 1, ¶¶ 64-73, 81-94, 206-12, 249-305; Ex. 318 (Bergman Reply) ¶¶ 64-73; Ex. 319 (Bergman 2022 Dep.) 50:6-54:7, 52:1-15, 119:17-122:8; Ex. 320 (Bergman 2019 Dep.) 194:16-199:17; TT 941:3-944:9; 952:17-24; 953:11-954:11; 954:19-961:14; 958:15-961:14.

There is abundant evidence that the patented invention is critically important to VMware's customers. *See., e.g.*, Exs. 55, 69, 98, 103, 198, 269, 321-329; TT 409:13-25, 672:10, 678:10-679:12. And Mr. Bergman conducted a thorough, evidence-based analysis of the importance, benefits, and

value of practicing the '687 method claims, considered usage-related evidence. *See, e.g.*, Ex. 317 (Bergman Report) § 1, ¶¶ 81-94, 206-12, 249-305, 417-19, 430, 444-48; *id.* § 2, ¶¶ 120-23; Ex. 318 (Bergman Reply) ¶¶ 64-73; Ex. 319 (Bergman 2022 Dep.) 50:6-54:7, 119:17-122:8; Ex. 320 (Bergman 2019 Dep.) 190:18-192:3, 194-16:199:17; Exs. 270, 330-332, 339; TT 941:3-944:9, 952:17-14, 953:11-954:11, 954:19-961:14.

VMware insists on a legal standard that is beyond that required by the Federal Circuit and, practically, would be impossible to meet. VMware has at least 500,000 customers,

Ex. 333 (500,000 customers); Ex. 334 (Walters Dep.) 124:10-22; Ex. 331 at 3. On VMware's theory, Densify would need to depose or obtain information from each customer to prove damages. That is neither possible nor necessary. Mr. Bergman has explained why it is not possible to precisely calculate VMware customers' usage of the patented method steps. Ex. 319 (Bergman 2022 Dep.) 119:17-122:8; see also Ex. 317 (Bergman Report) § 1, ¶ 299; Ex. 318 (Bergman Reply) ¶ 64-72; Ex. 320 (Bergman 2019 Dep.) 194:16-199:1. VMware's expert, Mr. Meyer, agrees. Indeed, he takes this overly rigid damage view to its logical conclusion, opining that it impossible to calculate a DRS reasonable royalty for the '687 patent and that no royalty is appropriate even assuming infringement and validity. See Ex. 335 (Meyer Dep.) 14:16-24, 15:8-21, 21:17-23:19.

# II. Mr. Bergman's DRS Apportionment Methodology Is Proper.

As the Court already found, "Mr. Bergman's opinions are properly grounded in the facts of the case," "Mr. Bergman establishes a logical methodology to arrive at his DRS apportionment number," and "VMware's arguments to the contrary go to the weight, not the admissibility, of the evidence." D.I. 467 at 3; *see also* D.I. 417 at 10-11 (motion). Further, while the Court's earlier ruling addressed only the '687 patent (as the others were not yet asserted), Mr. Bergman uses the same apportionment methodology for the '687, '492, and '459 patents. Ex. 317 (Bergman Report) § 2, ¶¶ 108-17.

The Court's prior decision was well supported. Mr. Bergman's thorough and considered

methodology for apportionment readily meets the Rule 702 standard. VMware argues that there is inadequate support for Mr. Bergman's apportionment. But this ignores the extensive evidence that Mr. Bergman evaluated and explained supporting this apportionment, including, among many other things, evidence of the importance of and demand for Densify's invention, its usage, and its benefits over the prior art. See, e.g., Ex. 317 (Bergman Report) § 1 ¶¶ 25-26, 81-94, 135, 206-12, 249-305, 417-19, 430, 444-48; id. § 2, ¶¶ 107-23, 136-86; TT 940:1-944:20, 952:2-961:11, 1000:18-1001:12; Exs. 270-271, 330-332, 336-338; Ex. 318 (Bergman Reply) ¶ 135; Ex. 320 (Bergman 2019) Dep.) 190:18; Ex. 339. In his analysis, Mr. Bergman evaluated and explained a variety of quantitative data. See, e.g., Ex. 317 § 1, ¶ 292 (87% of customers have affinity and anti-affinity rules that are enabled by the Densify patents); id. ¶¶ 90, 304 (VMware saying that it could charge for just one of many features enabled by the invention, compared to Mr. Bergman's ); TT 958:22-960:9 & Ex. 317 § 1, ¶ 299 (largest customers, for whom Densify's patented technology is most important, represented at least of all VMs); Ex. 320 at 190:18-192:3 & Ex. 339 (usage data when appropriately adjusted is consistent with apportionment); Ex. 317 § 1, ¶¶ 84, 91 (VMware's contemplated purchase of Densify's technology for \$200 to \$300 million; Goldman Sachs's projection that VMware would make from Densify's patented technology); id. ¶26 (substantial customer savings from patented invention); id. § 2, ¶¶ 120-23 & Ex. 318 ¶¶ 64-73 (analyzing telemetry data).

The Federal Circuit has acknowledged "the difficulty . . . in assigning value to a feature that may not have ever been individually sold." *Virnetx, Inc. v. Cisco Sys., Inc.*, 767 F.3d 1308, 1328 (Fed. Cir. 2014). Accordingly, "absolute precision" is not required; apportionment "may involve some degree of approximation and uncertainty." *Id.* 

Finally, contrary to VMware's unsupported assertion, Mr. Bergman carefully limited damages

to the incremental value of the infringing features. He first limited the royalty to reflect the features unique to vSphere Enterprise (the smallest saleable version of vSphere that included DRS), then apportioned to reflect the value of DRS among those features, the value of the patents to DRS, and beyond. Ex. 317 § 1, ¶¶ 244-307; TT 940:1-961:11, 1000:18-1005:3.

# III. Mr. Bergman's Direct Infringement Damages Opinions Are Methodologically Sound.

VMware also seeks to exclude Mr. Bergman's direct infringement opinions for the '687 patent. VMware Br. 48-49; D.I. 1438. The extensive and thorough analyses underlying Mr. Bergman's indirect DRS infringement opinions also support his reasonable royalty opinions for VMware's direct infringement of the '687 patent. Ex. 317 (Bergman Report) § 1, ¶¶ 197, 244-307, 398-455. Mr. Bergman relies on evidence that VMware's direct infringement through its testing, demonstration, and internal use of DRS. That is reasonable because the evidence shows that VMware's testing is a but-for and thus substantial cause of the DRS sales included in his reasonable royalty calculations. *See, e.g., id.* ¶ 197; Ex. 274 (Madisetti Vol. 1) ¶¶ 107-15. VMware itself has acknowledged that its testing is critically important to its sales; without testing the accused products, "you wouldn't be sure it works before you send it to a customer." TT 905:5-906:22. Moreover, the evidence demonstrates that VMware obtains substantial value from Densify's patented technology. TT 934:4-939:8, 941:3-944:9; Ex. 317 § 1, ¶¶ 9-197, 250-305, 417-419, 430, 444-48.

There is no categorical rule against Mr. Bergman's approach. VMware's cases are not to the contrary. VMware primarily relies on *Packet Intelligence LLC v. NetScout Systems, Inc., supra*. The damages issues in that case bear little resemblance to this one. There, the plaintiff sought to obtain damages for products that had not been properly marked. 965 F.3d at 1314-15. It tried to do indirectly what it could not do directly by claiming those damages based on an internal testing theory. *Id.* at 1315. The court determined that in the absence of detailed evidence connecting the testing to the sales in that context, the plaintiff could not obtain damages based on the unmarked pre-suit sales. *Id.* 

VMware's other cases are no closer to the mark. *See TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1291 (Fed. Cir. 2020) (plaintiff "presented no evidence of damages caused by [defendant's] direct infringement"); *Parallel Networks Licensing, LLC v. Int'l Bus. Machs. Corp.*, 2017 WL 1405155, at \*3 (D. Del. 2017) (expert did not present a direct infringement damages theory at all). None of VMware's cases state a categorical rule that damages for direct infringement of a method claim cannot be correlated with customer sales. What the cases require is a detailed and rigorous analysis to support that correlation, and Mr. Bergman did that here. Ex. 317 (Bergman Report) § 1, ¶¶ 197, 244-307, 398-455. The Court rejected VMware's previous arguments to exclude Mr. Bergman's opinions because the cases are not categorical and allow a reasonable royalty to be estimated so long as it is based on evidence. The Court should do the same here.

## IV. Densify's Lost Profits Damages Are Supported.

Separate from its reasonable royalty damages, Densify seeks profits it lost on certain sales. VMware does not challenge Mr. Bergman's lost profits methodology—it challenges only the legal basis for claiming lost profits. But its argument is irreconcilable with the facts. For starters, VMware's argument rests on the assumption that the patent owner and operating entity with lost sales are different entities. But that is not true after the April 2022 amalgamation, when "[b]y operation of law Inc. and IP fused and combined under one name, 'Cirba Inc.'" D.I. 1396 at 8. "As a result of the amalgamation, post-amalgamated Cirba Inc. possesses all the property, rights, and privileges of Inc. and IP that existed at the time of the amalgamation." *Id.* So at a minimum, Inc. is entitled to post-amalgamation lost profits. Ex. 318 (Bergman Reply) ¶ 62.9

Next, VMware ignores the March 2021 Inc.-IP license amendment. As a result of the

<sup>&</sup>lt;sup>9</sup> Densify would be legally entitled to pursue all calculated lost profits if, as Densify has argued, Inc. had Article III standing from the outset of this case. *See* D.I. 1239 at 12. Mr. Bergman's report included these damages as well to preserve this issue.

amendment, Inc. indisputably had the necessary rights in '459 patents by at least March 2021, so Inc. can seek lost profits beginning no later than March 2021. *See* Ex. 342; D.I. 1239 at 9-10. *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1025 (Fed. Cir. 2006) (exclusive licensees can recover lost profits).

Finally, contrary to VMware's argument, IP is entitled to pre-amalgamation lost profits. IP held title to the patents and was the owner of the software product for which it seeks lost profits. Ex. 343 ¶¶ 1(a)(vii)(viii), 2(a); see also Ex. 317 (Bergman Report) § 1, ¶¶ 324-35. Moreover, IP is seeking its own lost profits, not Inc.'s. These profits include IP's right to

See, e.g., Ex. 318 (Bergman Reply) ¶ 63; Ex. 317 § 1, ¶¶ 333-34; Ex. 43;

D.I. 1242. VMware's cases do not foreclose this approach. They turn on a patent licensor that does not sell products being precluded from obtaining lost profits. Here, in contrast to VMware's cases, IP owned the underlying product (software) in addition to title to the patents. Inc. was the distributor of those products. Because IP was selling products (through Inc.), IP is entitled to its lost profits. 10

<sup>&</sup>lt;sup>10</sup> There are a whole host of additional matters buried in VMware's proposed order that are not discussed in VMware's brief. None of them should be considered.

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Respectfully submitted,

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